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ABSTRACT

This paper focuses on the development of a modified, zero-based curriculum review of programs at a land-grant research university in the southeastern United States which was directed toward demonstrating the viability, and justifying the existence, of current programs. A small group of faculty developed an eight-step process which was used by other faculty to review six graduate programs in one department. The steps included: (1) developing a preliminary list of desired graduate attributes, (2) refining the list of desired graduate attributes, (3) quantifying significant graduate characteristics, (4) developing a matrix, (5) soliciting input from external faculty for support courses, (6) visually inspecting the matrix, (7) quantifying matrix information, and (8) using the matrix information. Although results varied by program, each program found skills and abilities that were receiving insufficient attention and others that were overly emphasized. The information gathered prompted faculty to make several significant changes to existing courses. The paper concludes that this is a cost-effective model that provides a thorough review while taking into account limited faculty time and resources. (Contains 5 references.)(CH)

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Starting from Somewhere: Modified Zero-Based Curriculum Review

Paper Prepared for the Association for Institutional Research Annual Forum
Minneapolis, Minnesota

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Dolores Vura
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Abstract

During the past few years, higher education has come under much closer scrutiny, suffered from reduced budgets, and been more legislatively controlled than any time in the past. As part of the budget crisis at this research II, land-grant university, the departments within the college of Health, Education and Human Development were informed that no new faculty positions could be created and no existing faculty positions could be filled until a thorough zero-based curriculum review process was completed. The focus of this presentation is on the development of a modified, zero-based curriculum review approach and the impact it has already exerted on course planning.

Introduction

In the past few years, higher education has not fared well as state allocations have continued to shrink. Additionally, a greater emphasis on assessment and accountability has increased the level of scrutiny paid to how the business of higher education is conducted. Any time necessity dictates a decrease in budgets, methods are devised to determine where and how money will be allocated. This is usually preceded by attempts to avoid duplication of services, or the cutting of services that are considered unnecessary or unjustified.

Recently, a college Dean within a research II, land-grant university instructed his faculty to perform a zero-based curriculum review of their programs to demonstrate their viability and justify their existence. Although poorly defined, this process was believed to be the most appropriate means to provide evidence of program health. The stipulation, which came with the edict to perform the review, was that no faculty positions could be created and no existing vacant faculty position could be filled until the review was completed. The review was intended to provide a justification for future resource requests and to assure that services were not being unnecessarily duplicated or misused.

In an attempt to better understand the concept of zero-based curriculum review, the faculty in one department consulted the literature. Although program evaluation literature is plentiful (Barak, 1982; Conrad & Wilson, 1985, Barak & Breier, 1990; Underwood & Underwood, 1996) information on zero-based review was limited. Apparently drawing on much of the program review literature, Paulsen and Peseau (1992) developed an excellent model of zero-based curriculum review, complete with specific guidance as to the phases and steps required to conduct the review. The model begins with a tabula rasa and the commitment that program faculty and an external advisory board will create a framework of competencies, knowledge bases, professional practices and skills

which graduates should have (Paulsen & Peseau, 1992, p. 211). Briefly, the procedure for completing a zero-based curriculum review involves constructing a table or matrix that shows the entire scope and sequence of the program's curriculum. This matrix represents a framework of appropriate competencies, discipline-based knowledge, and the practices and skills needed by program graduates for future professional work. A thoughtful examination of the Paulsen and Peseau model led the faculty to the conclusion that, although implementation of such a comprehensive review will no doubt provide an unbiased method of defining a curriculum from scratch, it seems unwieldy and laborious to assume that nothing which currently exists is effective.

Methodology

As a result of these concerns, the faculty made a decision to use a modification of the process that would accomplish similar results. Rather than start with nothing to build a curriculum, as recommended by Paulsen and Peseau (1992), and require faculty and external advisors to identify appropriate skills, knowledge and abilities required of our graduates, the decision was made to consider published requirements which were already in existence. For example, many of the programs within the department are accredited or accreditable by groups such as the National Council for the Accreditation of Teacher Education (NCATE) and the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). These accrediting and oversight bodies typically specify various skills and abilities graduates of the programs must possess. These requirements were viewed as an excellent base from which to begin.

Using the Paulsen and Peseau (1992) model as a philosophical framework, a small group of faculty developed an eight-step process to help the remainder of the faculty conceptualize the review. The process was shared with the faculty and slight modifications were made. The following is the final process adopted for use by the faculty.

Considerations for Zero Based Curriculum Review

1. **Develop Preliminary List of Desired Graduate Attributes:** For each degree program (Masters in Counseling, Masters in Education, Education Specialist, etc.) define the skills, knowledge, ability, personal characteristics, etc., graduates are expected to have. Look first at accreditation or oversight bodies (CACREP, NCATE, etc.) to determine if these bodies require or suggest special skills, knowledge, abilities or personal characteristics of graduates. Using the requirements of the accrediting or oversight bodies where possible, develop a list of skills, knowledge, abilities or personal characteristics desired. Where no requirement exists, use faculty expertise to develop the required skills, abilities, etc.
2. **Refine List of Desired Graduate Attributes:** Circulate the completed list among the faculty in each of the degree programs to obtain their input for additional skills, knowledge, abilities or personal characteristics not already covered by the accreditation or oversight body or identified by the faculty expert(s). Faculty should also look for duplicative items when completing a review of the preliminary list. Use this input to refine the preliminary list.
3. **Quantify Significance of Graduate Characteristics:** Each faculty member should assign points to the characteristics based on his or her impression of the relative importance of each skill. There are several approaches that might be used for this aspect of the review; however, since a regular rank ordering may be difficult (because of several things being considered to be of great significance) it might be best to only rate the 10 most important, or to give a set number of points to be allocated, or some other similar method. Once this is done a numerical score can be derived for each item indicating its relative importance to the faculty.
4. **Develop a Matrix:** Once the list has been finalized (accrediting or oversight bodies plus program faculty input listed) and the items have been

ranked, put the requirements into a matrix format with the skills, knowledge, abilities and personal characteristics down the side (the rows) in order of importance and the courses required for the degree across the top (the columns). Each instructor for the classes listed across the top should then rate within the column the degree to which each skill, knowledge, ability or personal characteristic is emphasized within his or her class. Ratings of high, moderate and low should be sufficient.

5. **Solicit Input From External Faculty for Support Courses:** For support courses outside the major department (Foundations, Experimental Statistics, etc.) input would need to be obtained from those faculty as well.
6. **Visually Inspect the Matrix:** Visual inspection of the matrix should indicate points at which each of the desired characteristics are absent from instruction as well as points in which there may be overlap.
7. **Quantify the Matrix Information:** Further assess the matrix by assigning points to each high, moderate or low rating to develop both row and column totals. The row total is an indication of the relative emphasis being placed on the characteristic across the degree program. Column totals provide an indication of the relative contribution of each course to the desired outcomes of the curriculum.
8. **Use the Matrix Information:** Once the matrix is completed, a determination can be made as to whether new courses need to be developed or existing courses should be eliminated or restructured. The emphasis in all cases should be on the extent to which the courses provide the skills, knowledge, abilities or personal characteristics deemed to be appropriate by the faculty and the accrediting or oversight bodies; not the title, or teacher, of an individual course.

After the approval of the model for the review process, the actual review began with the skills and abilities for each program of study, as identified by various accrediting bodies or faculty, being typed into a matrix format with

each of the necessary skills or abilities making up the rows. Once the requirements from the various accrediting bodies were in the matrix, it was circulated among the faculty for their input regarding any additions that might make the list more complete.

During the initial phase of the identification of the skills and abilities, a problem surfaced concerning the level of specificity for each of the skill or knowledge areas. The heuristic, which follows, was developed to help faculty address this problem.

A Heuristic to Clarify the Level of Specificity Problem in the Proposed Zero-Based Curriculum Review Model

Questions have been raised about determining the appropriate level of detail for the skills, knowledge, ability or personal characteristic listing on the example provided for doing zero-based curriculum review. A large portion of the difficulty arises from problems inherent in the term "appropriate" and another portion comes from the fact that these skills, in many cases, have been set forth by an accrediting or oversight body, which can lead to generalization. The determination of what is appropriate, as well as the specification of the skill, is a major outcome of this process and legitimately falls within the purview of faculty's best judgment based on faculty expertise, departmental mission and program focus.

Perhaps the best way to illustrate is with an example. Within the Community Agency Counseling program, desired graduate knowledge includes theories of learning and personality. Theories of learning and personality should probably be two categories since, although not unrelated, they are really two separate areas. To illustrate the point about specificity, consider these as two issues. Focus first on the theories of learning and consider the following process: Think about the

knowledge base, in this case theories of learning, (you will note that there are many) and try to answer the following question.

In my best judgment, for this program, with our departmental mission and our program emphasis, which theories of learning are most appropriate and must be taught? Classical Conditioning? Social Learning? Information Processing? (The answer to this could be different if the program is producing elementary school counselors or if it is producing high school counselors or if it is producing adult counselors, etc.)

Those theories of learning which fall out from the above question would be added to the list and the broader term theories of learning would be retained as a category heading. The theories on the list would, in effect, be the theories of learning which you believe graduates of your program must have in their knowledge base. It is not feasible to assume all students who graduate from your program should have a knowledge base about all theories of learning.

This heuristic was applied to each of the skills provided by an accrediting or oversight body until all of the critical skills had been teased out to an appropriate level of specificity. As the heuristic suggests, the faculty were advised to think in terms of high level or broad skills and abilities.

Once faculty were satisfied with the completed list of skills and abilities, selected core courses were entered across the top of the matrix. Each faculty member then recorded in which course, and to what extent, each skill or ability was taught. Ratings representing high, moderate, and low were used to indicate extent of coverage of each skill within each course.

A visual inspection of the matrix at this point identified areas where skills and abilities were absent from instruction as well as areas where duplication was occurring. The completed matrix then provided an excellent basis for valuable discussions regarding the status of the curriculum.

Results

The modified zero-based curriculum review process was used to review six graduate programs in one department. The results naturally varied by program, however, it is instructive to note that each program found skills and abilities that currently receive insufficient attention and other skills and abilities that are overly emphasized. This information prompted the faculty to make several significant changes to existing courses. An example of such a change occurred in the Higher Education Counseling program. The introductory course was totally reworked to incorporate some missing instruction and to eliminate unnecessary duplication.

Implications

The review process initially met with resistance because of the additional demands on the faculty and the lack of clarity in the requirement and the process. However, after the modifications to the process, which were made shortly after beginning, and the positive results which came from the discussions, most faculty were ultimately pleased with the results. For academic units considering undertaking a curricular review there are some lessons learned by this faculty worthy of note.

Many decisions will need to be made early in the process regarding such things as: the philosophical framework for the review, the programs to be reviewed, the extent of the review, whether to include external groups such as advisory boards, current students, or program graduates in the process, the resources to be committed to the review, and the timeframe for the process. If using a modified process such as has been described here, the reviewers will want to consider how to address general education and similar instructional courses taken outside the unit. Additionally, the reviewers will have to determine who will develop the list of skills and abilities, especially if no lists are readily available. Perhaps equally important as the process to be used is attention to effective facilitation of the process. Since the real

value to be gained from the process are the insights obtained from the faculty discussions, thought should be given to who will facilitate the discussions and how the process will be facilitated to insure candid and thoughtful discussions.

Although a review of this nature should not be undertaken lightly, given the time and resources necessary to properly carry it out, the potential gains to the academic unit are great. If the faculty work together to conduct the review, there should be a fundamental agreement of what skills a competent graduate of the program should have and a heightened appreciation of what each member of the unit contributes to the development of well educated graduates. Unnecessary duplication of effort can be eliminated and these resources can be rechanneled to supplement weaknesses in the curriculum. The department can justify current and future expenditures of resources. And, most critically, the faculty can be assured they are providing excellent preparation to future professionals.

Conclusion

The process utilized in this curriculum review can be easily adapted to fit any type of institution or program. As the competition for resources continues to be fierce, faculty and administrators alike will be asked to assess their programs and units. This cost-effective model provides a thorough review approach, while taking into account limited time and resources. If conducted with due care, the process will capitalize on exiting information while generating much fuel for faculty discussion.

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